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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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LSI CORPORATION 1621 BARBER LANE MS: D-105 MILPITAS, CA 95035			EXAMINER SAEED, USMAAN	
			ART UNIT 2166	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/764,205

Applicant(s)

MUKKER, ATUL

Examiner

USMAAN SAEED

Art Unit

2166

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 12-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, and 12-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Receipt of Applicant's Amendment, filed 10/10/2008 is acknowledged.
Claims 1-3, 12-14, and 16-17 have been amended and claims 18-22 are cancelled.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear from claims that what happens if the desired data has not been deleted from the command line. If the desired data was not deleted then the recovery of said data would not take place.

Appropriate correction is required

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, and 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPG Pub, 2003/0149752, Baldwin et al. (Baldwin hereinafter) in view of USP, 5,778,387, Wilkerson et al. (Wilkerson hereinafter), further in view of USP 6,615,224, Lewis B. Davis (Davis hereinafter).

With respect to claim 1,

Baldwin teaches method in a data-processing system for recovering data (see Paragraph 0342, Baldwin), said data processing system having a central processing unit coupled to an operating system, memory coupled to said central processing unit, and a command line interface to said operating system in which a user responds to a visual prompt by typing in a command on a specified line and receives a response back from the system, (see Abstract, Baldwin) the method comprising:

utilizing said command line interface to interact with said operating system (see Paragraph 0118, Baldwin);

identifying desired data from said command line interface displayable within a display area of a data-processing system (see Abstract, Paragraphs 0075, 0100, Baldwin);

Baldwin teaches the elements of claim 1 as noted above but does not explicitly teaches "automatically saving said desired data in said memory of said data- processing system, in response to identifying said desired data from said command line interface" "testing to determine if said desired data has been deleted from said

command line of said command line interface” and “if said desired data has been deleted from said command line of said command line interface, automatically recovering said desired data from said memory of said data-processing system for display within said command line interface.”

However, Wilkerson teaches automatically saving said desired data in said memory of said data-processing system, in response to identifying said desired data from said command line interface (see col. 12, lines 16-24, Figs. 3-8 Wilkerson); and automatically recovering said desired data from said memory of said data-processing system for display within said command line interface, (see col. 19, lines 50-56, Fig. 32, Claim 1, Wilkerson).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because Wilkerson's teaching would have allowed Baldwin to provide an automated recovery system which provides consistency for recovery procedure and eliminate the risk of error and delay.

Baldwin and Wilkerson teach the elements of claim 1 as noted above but do not explicitly disclose “testing to determine if said desired data has been deleted from said command line of said command line interface” and “if said desired data has been deleted from said command line of said command line interface.”

However, Davis discloses “testing to determine if said desired data has been deleted from said command line of said command line interface” and “if said desired data has been deleted from said command line of said command line interface” as

system calls inside the UNIX operating system kernel and create hidden versions of files and directories which are deleted from the command-line using the "rm" command (see Col 3, Lines 9-20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because Davis's teaching would have allowed Baldwin and Wilkerson to provide a method of file protection on UNIX platforms during file deletion processes, whereby no system performance is sacrificed and to enhance UNIX operating system performance, because final destruction of the oldest deleted files is done in large batches.

Claim 12 has the same subject matter as of claim 1 and is essentially rejected for the same reasons as discussed above.

With respect to claim 2,

Baldwin does not explicitly teaches displaying an original file of said desired data within said command line interface, displaying an original file location of said desired data within said command line interface, indicating within said command line interface deletion of said desired data in response to said desired data being deleted using said command line interface, and displaying said data within said command line interface, in response to automatically recovering said data from said memory location of said data-processing system.

However, WILKERSON teaches displaying said data within said command line interface, in response to automatically recovering said data from said memory location of said data-processing system (see col. 12, lines 16-24, Figs. 3-8 Wilkerson).

indicating within said command line interface deletion if said desired data in response to said desired data being deleted using said command line interface (see col. 19, lines 50-56, Fig. 32, Claim 1, Wilkerson).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because Wilkerson's teaching would have allowed Baldwin to provide an automated recovery system which provides consistency for recovery procedure and eliminate the risk of error and delay.

WILKERSON teaches the elements of claim 2 as noted above but does not explicitly teaches "displaying an original file of said desired data within said command line interface, displaying an original file location of said desired data with said command line interface."

However, Davis teaches displaying an original file of said desired data within said command line interface and displaying an original file location of said desired data with said command line interface as FIG. 6 illustrates a particular example of the directory block 450 with its records for various files and their inode pointers. The particular file 430 is recorded in its directory block 450 at the location 604 in FIG. 6. The inode pointer 608 in the file record 604 is displayed in the first field 616 of the directory block (see Abstract and Col 6, lines 32-37, Davis).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because Davis's teaching would have allowed Baldwin and Wilkerson to provide a method of file protection on UNIX platforms during file deletion processes, whereby no system performance is sacrificed and to enhance UNIX operating system performance, because final destruction of the oldest deleted files is done in large batches.

With respect to claim 3, Baldwin and Wilkerson do not explicitly teach displaying with the same window of said command line interface said original file, said original file location, said indication of deletion of said desired data, and said recovered data.

However, Davis discloses displaying with the same window of said command line interface said original file, said original file location, said indication of deletion of said desired data, and said recovered data as (see Figure 6 Davis).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because Davis's teaching would have allowed Baldwin and Wilkerson to provide a method of file protection on UNIX platforms during file deletion processes, whereby no system performance is sacrificed and to enhance UNIX operating system performance, because final destruction of the oldest deleted files is done in large batches.

With respect to claim 4,

WILKERSON does not explicitly teaches "wherein said operating system comprises a Linux based operating system."

However, Davis discloses wherein said operating system comprises a Linux based operating system, as (see Col 5, Lines 66-67, Col 6, Lines 1-10 and Col 2, Lines 1-10).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because Davis's teaching would have allowed Baldwin and Wilkerson to provide a method of file protection on UNIX platforms during file deletion processes, whereby no system performance is sacrificed and to enhance UNIX operating system performance, because final destruction of the oldest deleted files is done in large batches.

With respect to claim 5-6,

Baldwin teaches wherein said operating system comprises a Unix based operating system, windows based operating system as (see Abstract Baldwin).

With respect to claim 7,

Baldwin does not explicitly teaches "the permitting a user to specify a plurality of rules for recycling said data; recycling said data, in response to user input."

However, WILKERSON teaches the steps of: permitting a user to specify a plurality of rules for recycling said data; recycling said data, in response to user input (see col. 24, lines 30-40, Fig. 45 Wilkerson).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because Wilkerson's teaching would have allowed Baldwin to provide an automated recovery system which provides consistency for recovery procedure and eliminate the risk of error and delay.

With respect to claim 8,

Baldwin does not explicitly teaches the limitations of claim 8, however, Wilkerson teaches the step of prompting said user to specify said plurality of rules for recycling said data through a display of a graphical user interface dialog (see col. 19, lines 10-25, Wilkerson).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because Wilkerson's teaching would have allowed Baldwin to provide an automated recovery system which provides consistency for recovery procedure and eliminate the risk of error and delay.

WILKERSON teaches the elements of claim 8 as noted above but does not explicitly teaches "specifying the minimum size of said data to be recycled and/or specifying special files/empty directories not to be recycled."

However, Davis discloses specifying the minimum size of said data to be recycled and/or specifying special files/empty directories not to be recycled as (see Col 4, Lines 18-23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because Davis's teaching would have allowed Wilkerson to provide a method of file protection on UNIX platforms during file deletion processes, whereby no system performance is sacrificed and to enhance UNIX operating system performance, because final destruction of the oldest deleted files is done in large batches.

Claims 13-17 have the same subject matter as of claims 2-8 and essentially rejected for the same reasons as discussed above.

Response to Arguments

4. Applicant's arguments filed on 10/10/2008 have been considered but are moot in view of the new ground(s) of rejection.

In these arguments applicant relies on the amended claims and not the original ones.

Claims must be given the broadest reasonable interpretation during examination and limitations appearing in the specification but not recited in the claim are not read into the claim (See M.P.E.P. 2111 [R-I]).

Examiner has combined a new reference Baldwin et al as new primary reference which discloses that a storage area network (SAN) has a plurality of components including digital data processors, e.g., hosts, coupled to a plurality of storage device.

Common, platform-independent processes execute on the hosts, which can be of varied platform types, e.g., Unix.TM., Windows.TM., Solaris, and so forth. Those processes utilize the command lines interface of the host operating system to invoke platform-dependent processes on the respective hosts. The platform-dependent processes return data to the platform-independent processes, e.g., via Standard Output or Standard Error of the host operating system command line interface (Baldwin abstract).

Therefore these lines teaches data processing system having memory/storage devices, operating system e.g., Unix.TM., Windows.TM., Solaris, and so forth, and a command line interface to interact with the operating system.

Davis discloses "testing to determine if said desired data has been deleted from said command line of said command line interface" and "if said desired data has been deleted from said command line of said command line interface" as system calls inside the UNIX operating system kernel and create hidden versions of files and directories which are deleted from the command-line using the "rm" command (see Col 3, Lines 9-20).

Examiner interprets the deletion of file and directories from the command line using rm command as data being deleted from command line of said command line interface.

Further Wilkerson teaches an automated recovery system. Therefore the combination of all the three reference teaches the claimed invention as a whole.

Further, it is unclear from claims that what happens if the desired data has not been deleted from the command line. If the desired data was not deleted then the recovery of said data would not take place. Based on this interpretation examiner would not need to address the automatic recovery limitation.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to USMAAN SAEED whose telephone number is (571)272-4046. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571)272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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